UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	09/839,495	MATSUTANI, KIYOSHI
	Examiner	Art Unit	
	JASON M. BORLINGHAUS	3693	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>3/06/09 & 2/12/09</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-15</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-15</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 – 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Gopinathan (US Patent 5,819,226) and Mockett (US PG Pub. 2001/0034702).

Regarding Claim 1, Gopinathan discloses an information terminal apparatus

comprising:

- communication means (data network) for transmitting and receiving

  information among the said communication means, and a server (financial

  data facility). (see col. 3, lines 34 – 55);

- processing means for executing a comparison process (comparing) as to

  both historical information (historical data on individual transactions) and

balance account (available credit or balance). (see fig. 8; col. 5, line 50 -
col. 7, line 5; col. 26, line 64 - col. 27, line 2);

- said historical information being contained in the transmission and
  reception information of said communication means. (see col. 3, lines 34 –
  55; col. 5, line 50 - col. 7, line 5); and

- output means for outputting predetermined comparison result information
  based upon the comparison process result by the processing means. (see
  fig. 8).

Gopinathan does not explicitly disclose that the apparatus communicates with a
server of a credit card firm and a server owned by a settling financial institution; nor
obtaining information from said servers for a comparison process, although Gopinathan
does disclose that to create a comparison requires access to past financial data such as
is provided by "credit-card authorization terminals and automated teller machines." (see
col. 3, lines 34 – 55).

Mockett discloses an apparatus comprising communication means (Internet) for
transmitting and receiving information among the said communication means, a server
of a credit card firm (credit card approval network), and a server owned by a settling
financial institution which settles a charge requested from said credit card firm
(automated clearing house/merchant bank). (see fig. 1; para. 17).

It would have been obvious to one of ordinary skill in the art at the time the
invention was made to have modified Gopinathan to incorporate the features disclosed

by Mockett, allowing a payment fraud detection system to communicate with the system

components that actually enable and perform the payment functions.

Regarding Claims 2 – 6 and 8, Gopinathan discloses an apparatus wherein:

- said processing means comprises periodic charge information

  (transactions from the period) extracting means for extracting periodic

  charge information (transactions from the period) from the credit card

  charge historical information. (see col. 27, lines 3 – 63);

- prediction means for predicting an estimated charge amount (dollar

  amount spent in each SIC; transaction amount) based on said extracted

  periodic charge information. (see col. 7, line 32 – col. 8, line 35; col. 19,

  lines 10 – 16);

- said processing means executes the comparison process as to said credit

  card charge historical information containing said estimated charge

  amount and said balance account information. (see col. 7, line 32 – col. 8,

  line 35; col. 19, lines 10 – 16);

- taste information extracting means for extracting taste information of a

  user based upon shop use historical information (merchant category code,

  merchant ZIP code) which are contained in the credit charge historical

  information. (see col. 26, line 64 - col. 27, line 2);

- providing means for providing taste information (current transaction

  data/customer data) with a top priority while one of a shop (merchant

  category data) is retrieved. (see col. 26, line 64 – col. 27, line 2);

- storage means (data storage) for storing thereinto the taste information extracted by said taste information extracting means. (see fig. 1; col. 3, lines 34 – 55);

- storage means is constituted by a non-volatile storage medium (ROM and disk storage devices). (see col. 3, lines 55 – 65); and

- said storage means (disk) is arranged in such a manner that the taste information can be replaced with respect to an external appliance, while said storage means is detachably mounted on the information terminal apparatus, or is communicated to the external appliance. (see col. 3, lines 55 – 65);

- an input means for inputting (from database) first identification (PIN) of the user. (see col. 26, line 64 - col. 27, line 2); and

- identifying means (PIN) for judging (verification) as to whether or not said user can use the credit card based upon said first identification information entered by said inputting means. (see col. 26, line 64 - col. 27, line 2);

Gopinathan does not teach an apparatus wherein said input means inputs second identification information which is transmitted from the communication means to both the credit card firm and the server of the settling financial institution so as to identify the user.

Mockett discloses an apparatus wherein said input means inputs second identification information (dynamic credit card number) which is transmitted from the

communication means to both the credit card firm and the server of the settling financial institution so as to identify the user. (see para 27).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Gopinathan and Mockett to include communication the usage of a second user identifier, as disclosed by Mockett, thereby providing increased user authentication and system security.

Claims 7 and 9 – 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gopinathan and Mockett, as applied to Claim 1 and 6 above, and further in view of Hassett (US Patent 6,653,946).

Regarding Claim 7, Gopinathan does not teach an apparatus wherein said input means utilizes a remote control operation by way of a wireless communication.

Hasset discloses an apparatus wherein said input means utilizes a remote control operation by way of a wireless communication. (see col. 1, line 64 to col. 2, line 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Gopinathan and Mockett to include wireless communication, as disclosed by Hasset, thereby providing apparatus mobility and increasing ease of remote communication.

Regarding Claims 9 – 15, Gopinathan discloses an apparatus comprising:

- said processing means executes a comparison process as to the credit card charge historical information (historical data on individual

transactions) and the balance account information (available credit or balance). (see fig. 8; col. 5, line 50 - col. 7, line 5; col. 26, line 64 - col. 27, line 2);

- taste information extracting means for extracting taste information of the user based upon either shopping historical information (historical data on individual transactions). (see fig. 8; col. 5, line 50 - col. 7, line 5; col. 26, line 64 - col. 27, line 2); and

- providing means for providing said taste information (current transaction data/customer data) with a top priority while one of a shop (merchant category data) is retrieved. (see col. 26, line 64 – col. 27, line 2).

Gopinathan does not teach an apparatus comprising means for monitoring operation conditions of said communication means; warning means for issuing a warning notice in the case that an abnormal operation is confirmed by said monitoring means; releasing means for releasing the operation of either said monitoring means; said monitoring means confirms the abnormal operation of the communication function under such a state that the operation of said monitoring means is not released by the releasing means, the warning notice is issued by said warning means; said communication means is further comprised of positional move sensing means for sensing a positional move of said communication means; when at least one of unauthorized information and incorrect information into said releasing means under such a state that the operation of the monitoring means is not released by the releasing means, the warning notice is issued by said warning means; said processing means

executes a comparison process as to toll road fee historical information supplied from

an electric toll collection system; nor said information terminal apparatus is mounted on

a mobile object

   Hassett discloses an apparatus comprising:

- monitoring means (signal strength evaluation unit) for monitoring operation
  conditions of said communication means. (see 11, lines 1 - 13);

- warning means (beeper and red blinking red light alarm) for issuing a
  warning notice in the case that an abnormal operation (invalid IVC) is
  confirmed by said monitoring means. (see col. 30, lines 22 – 42);

- releasing means for releasing (resetting) the operation of either said
  monitoring means (signal identification information) used to identify the
  user. (see col. 30, lines 22 – 42);

- said monitoring means confirms the abnormal operation of the
  communication function under such a state that the operation of said
  monitoring means is not released by the releasing means, the warning
  notice is issued by said warning means (alarm module). (see col. 21, lines
  26 - 31);

- said communication means is further comprised of positional move
  sensing means for sensing a positional move of said communication
  means. (see col. 4, lines 57 - 67);

- when at least one of unauthorized information and incorrect information
  (improper acknowledgment signal) is entered into said releasing means

under such a state that the operation of the monitoring means is not

released by the releasing means, the warning notice is issued by said

warning means (alarm module). (see col. 21, lines 26 - 31);

- said processing means executes a comparison process as to toll road fee

  historical information (toll charges) supplied from an electric toll collection

  system. (see col. 12, lines 36 – 48); and

- said information terminal apparatus is mounted on a mobile object

  (vehicle). (see col. 1, line 40 - col. 3, line 41).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to have modified Gopinathan and Mockett to incorporate a toll

payment device, as disclosed by Hassett, allowing the application of a fraud detection

system, as disclosed by Gopinathan, and the application of an electronic payment

system, as disclosed by Mockett, thereby providing enhanced security and automation.

Response to Arguments

Applicant's arguments filed 2/12/09 have been fully considered but they are not

persuasive.

§103 Rejection

Applicant argues that it would not have been obvious to one of ordinary skill in

the art at the time the invention was made to have modified Gopinathan by

incorporating elements of Mockett.

Specifically, Applicant asserts that "obtaining information from the settling financial institution is meaningless in order to predict the fraudulent transaction. A sign of the fraudulent transaction appears in the credit-card transaction, not in the settlement information of the settling financial situation."

First, during examination, "claims … are to be given their broadest reasonable interpretation consistent with the specification, and … claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art." *In re Bond, 910 F.2d 831, 833 (Fed. Cir. 1990)*. There is nothing in the claims nor the specification that indicates that the "server owned by a settling financial institution which settles a charge requested from said credit card firm" is not another credit card server, as the credit card holder's credit card company is a financial institution that is settling a change on the account holder's behalf.

Second, even assuming that Applicant's interpretation is correct, Gopinathan discloses that while the specification utilizes the term "credit card" that the "principles discussed herein apply to other types of customer accounts, such as charge cards, ***bank automated teller machine cards*** and telephone calling cards. " (see col. 1, line 20 - 26). Such disclosure would indicate that the system of Gopinathan would require information from servers outside of credit card firms, such as servers of a settling financial institution (e.g. a bank).

Applicant asserts that "the administrator (for example, credit-card firm) of the system is not authorized to obtain the account balance information settling financial

institution. Only the account holder...is authorized to obtain the balance account information from the settling financial institution."

It should be noted that the issue of user authorization is a matter that is outside the scope of the claimed invention, as there is no claim language directed toward the issue of user authorization.

Regardless, Examiner asserts that while Gopinathan may not address the issue of user authorization, not addressing is different than "teaching away" as defined by the Courts. The Courts have stated that "[a] reference may be said to teach away when a person of ordinary skill, upon reading the reference,…would be led in a direction divergent from the path that was taken by the Applicant." *Tex Air, Inc. v. Denso Mfg. Mich. Inc., 192 F.3d 1353, 1360, 52 USPQ2d, 1298 (Fed. Cir. 1999).* In the instant case, the failure of Gopinathan to address user's authorization to utilize the system does not teach away from the system, itself. Furthermore, it is conceivable that the apparatus of Gopinathan is operated by the account holder, him or herself, which as Applicant has noted is authorized to obtain the balance information from the settling financial institution.

Applicant asserts that Mockett does not teach what kind of data they transmit or receive. However, "one cannot show non-obviousness by attacking references individually where, as here, the rejections are based on combinations of references." *In re Keller, Terry, and Davies, 208 USPQ 871, 882 (CCPA 1981).* In the instant case, Applicant is refuting Mockett individually, rather than viewing it in combination, in light of the totality of their combined teachings.

Applicant asserts that "Examiner does not point out which element of Mockett corresponds to the 'apparatus.'" Examiner asserts that the entirety of Mockett (System and Method for Dynamically Issuing and Processing Transaction Specific Digital Credit or Debit Cards) corresponds to the apparatus, and the components of Mockett correspond to components claimed within the claimed invention.

Furthermore, the Examiner has cited particular columns and line numbers in the references as applied to the claims for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Applicant asserts that Mockett fails to "disclose that the host computer 20 obtained the balance account information from a depository bank 14." However, "one cannot show non-obviousness by attacking references individually where, as here, the rejections are based on combinations of references." *In re Keller, Terry, and Davies, 208 USPQ 871, 882 (CCPA 1981)*. In the instant case, Applicant is refuting Mockett individually, rather than viewing it in combination, in light of the totality of their combined teachings. Gopinathan discloses obtaining balance information while Mockett discloses obtaining information from a depository bank. Therefore, in combination, Gopinathan and Mockett discloses obtaining balance information from a depository bank.

Applicant asserts that Gopinathan does not teach or suggest "prediction means

for predicting an estimated charge amount based on said extracted periodic charge

information."

Gopinathan states:

> Once the model has been created, trained, and stored, fraud detection may begin. Transaction processing component 802 of system 100 preferably runs within the context of a conventional authorization or posting system for customer transactions. _**Transaction processing component 802 reads current transaction data and customer data from databases 805, 806, and generates as output fraud scores representing the likelihood of fraud for each transaction.**_ Furthermore, transaction processing component 802 can compare the likelihood of fraud with a predetermined threshold value, and flag transactions for which the threshold is exceeded.

> The current transaction data from database 805 typically includes information such as: transaction dollar amount; date; time (and time zone if necessary); approve/decline code; cash/merchandise code; available credit (or balance); credit line; merchant category code; merchant ZIP code; and PIN verification (if applicable).

> The customer data from database 806 typically includes information from three sources: 1) general information on the customer; _**2) data on all approved or declined transactions in the previous seven days;**_ and 3) a profile record which contains data describing the customer's transactional pattern over the last six months. The general information on the customer typically includes information such as: customer ZIP code; account open date; and expiration date. The profile record is a single record in a profile database summarizing the customer's transactional pattern in terms of moving averages. _**The profile record is updated periodically (usually monthly) with all of the transactions from the period for the customer, as described below.**_ (emphasis added – see col. 25, line 60 – col. 27, line 27).

Gopinathan discloses a prediction means for predicting an estimated charge

amount (a fraud detection means for predicting whether a transaction amount has a

high likelihood of fraud); and that the prediction means' estimates are based on

extracted periodic charge information (periodically updated transaction information).

Applicant asserts that Gopinathan does not teach of suggest "taste information

extracting means for extracting taste information of a user based on shop use historical

information, facilities use information or shopping historical, which are contained in the

credit card charge historical information."

Gopinathan states:

Once the model has been created, trained, and stored, fraud detection may begin. Transaction processing component 802 of system 100 preferably runs within the context of a conventional authorization or posting system for customer transactions. *Transaction processing component 802 reads current transaction data and customer data from databases* 805, 806, and generates as output fraud scores representing the likelihood of fraud for each transaction. Furthermore, transaction processing component 802 can compare the likelihood of fraud with a predetermined threshold value, and flag transactions for which the threshold is exceeded.

The current transaction data from database 805 typically includes information such as: transaction dollar amount; date; time (and time zone if necessary); approve/decline code; cash/merchandise code; available credit (or balance); credit line; *merchant category code; merchant ZIP code;* and PIN verification (if applicable).

The customer data from database 806 typically includes information from three sources: 1) general information on the customer; 2) data on all approved or declined transactions in the previous seven days; and 3) a profile record which contains data describing the customer's transactional pattern over the last six months. The general information on the customer typically includes information such as: customer ZIP code; account open date; and expiration date. The profile record is a single record in a profile database summarizing the customer's transactional pattern in terms of moving averages. The profile record is updated periodically (usually monthly) with all of the transactions from the period for the customer, as described below. (emphasis added – see col. 25, line 60 – col. 27, line 27).

Gopinathan discloses a taste information extracting means (transaction

processing component) for extracting (reading) taste information of a user based upon

shop use historical information, facilities historical use information, or shopping historical

information (cash/merchandise code; merchant category code; merchant ZIP code….);

and all said information is contained in the credit card charge historical information

(transaction data).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to JASON M. BORLINGHAUS whose telephone number is

(571)272-6924. The examiner can normally be reached on 8:30am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, James Kramer can be reached on (571) 272-6783. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason M Borlinghaus/
Examiner, Art Unit 3693
April 26, 2009